

# **AMENDMENT NO. 1 AUGUST 2022**

**TO**

## **IS 8688 : 2004 PLASTICS BOTTLES FOR POTABLE WATER — SPECIFICATION**

*(Second Revision)*

*(Foreword, clause 0.1)* — Insert the following new clause after **0.1**:

‘This amendment is based on the FSSAI Regulations 2018 vide notification number F.No. 1-95/Stds/Packaging/SP (L&C/A)/FSSAI-2017, and draft amendment Regulations 2020, vide notification number F.No.Std/SP-20/T-01. This amendment includes specific migration limit of toxic substances listed by FSSAI.’

*(Page 1, clause 2)* — Substitute the following for the existing clause:

## **‘2 REFERENCES**

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreement based on standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

<i>IS No./Other Publication</i>	<i>Title</i>
IS 2798 : 1998	Methods of test for plastics containers ( <i>first revision</i> )
IS 3025 (Part 2) : 2019/ ISO 11885 : 2007	Methods of sampling and test (physical and chemical) for water and wastewater: Part 2 Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES) ( <i>first revision</i> )

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<i>IS No./Other Publication</i>	<i>Title</i>
IS 4905 : 2015/ ISO 24153 : 2009	Random sampling and randomization procedures <i>(first revision)</i>
IS 7019 : 1998	Glossary of terms in plastics and flexible packaging, excluding paper <i>(second revision)</i>
IS 7408 (Part 1) : 2000	Blow moulded polyolefin containers—Specification: Part 1 Up to 5 litres capacity <i>(first revision)</i>
IS 7511 (Part 4) : 1986	Dimensions for neck finishes: Part 4 Roll-on threads pilferproof <i>(first revision)</i>
IS 9833 : 2018	List of colourants for use in plastics in contact with foodstuffs and pharmaceuticals <i>(second revision)</i>
IS 9845 : 1998	Determination of overall migration of constituents of plastics materials and articles intended to come in contact with foodstuffs — Method of analysis <i>(second revision)</i>
IS 10142 : 1999	Polystyrene (crystal and high impact) for its safe use in contact with foodstuffs, pharmaceuticals and drinking water — Specification <i>(first revision)</i>
IS 10146 : 1982	Specification for polyethylene for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 10151 : 2019	Polyvinyl chloride (PVC) and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water — Specification <i>(first revision)</i>
IS 10910 : 1984	Specification for polypropylene and its copolymers for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 11434 : 1985	Specification for ionomer resins for its safe use in contact with foodstuffs, pharmaceuticals and drinking water
IS 11704 : 1986	Specification for ethylene acrylic acid (EAA) copolymers for their safe use in contact with foodstuffs, pharmaceuticals and drinking water

<i>IS No./Other Publication</i>	<i>Title</i>
IS 12247 : 1988	Specification for Nylon-6 polymer for its safe use in contact with foodstuffs pharmaceuticals and drinking water
IS 12252 : 2017	Polyalkylene terephthalates (PET and PBT), their copolymers and list of constituents in raw materials and end products for their safe use in contact with foodstuffs and pharmaceuticals ( <i>first revision</i> )
IS 14534 : 2016	Plastics — Guidelines for the recovery and recycling of plastics waste ( <i>first revision</i> )
ISO 18856 : 2004	Water quality— Determination of selected phthalates using gas chromatography/mass spectrometry.'

(Page 2, clause 4.13) — Insert the following new clause after clause 4.13:

#### **‘4.14 Determination of Specific Migration**

**4.14.1** The specific migration is tested to determine the quantity of a specific substance that can migrate from a food packaging material or food container into food. Specific migration limits are usually expressed as mg/kg food.

**4.14.2** The sample/simulants shall be prepared using the procedure described in IS 9845. The testing for detection of toxic substances shall be carried out as per method given in Table 2.

**4.14.3** The limit of specific migration of all toxic substances when tested as prescribed in column 4 of Table 2 shall not release the substances in quantities exceeding the specific migration limits listed under Table 2.

**Table 2 Specific Migration Limits**

(Clauses 4.14.2 and 4.14.3)

<b>SI No.</b>	<b>Toxic Substances</b>	<b>Migration Limit, Max, mg/kg</b>	<b>Test Method</b>
(1)	(2)	(3)	(4)
i)	Barium	1.0	IS 3025 (Part 2)
ii)	Cobalt	0.05	-do-

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**Table 2 (Concluded)**

<b>Sl No.</b>	<b>Toxic Substances</b>	<b>Migration Limit, Max, mg/kg</b>	<b>Test Method</b>
(1)	(2)	(3)	(4)
iii)	Copper	5.0	-do-
iv)	Iron	48.0	-do-
v)	Lithium	0.6	-do-
vi)	Manganese	0.6	-do-
vii)	Zinc	25.0	-do-
viii)	Antimony	0.04	-do-
ix)	Phthalic acid, bis(2-ethylhexyl)ester (DEHP)	1.5	ISO 18856*

*(Page 3, clause 7.2) — Substitute the following for the existing clause:*

### **‘7.2 BIS Certification Marking**

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.’